

IN THE SPECIFICATION:

Please amend the specification as follows:

Please insert the following paragraph at the top of page 1, immediately underneath the title, "INHIBITION OF RETROVIRUS INFECTION":

This application is a continuation-in-part of United States Patent Application No. 07/943,369, filed September 9, 1992, now abandoned. This application is also a continuation-in-part of United States Patent Application No. 08/209,040, filed March 9, 1994. This application is also a continuation-in-part of Patent Cooperation Treaty Application No. PCT/US93/08486, which was filed September 9, 1993, and which designated the United States (Publication No. WO 94/06454).

Page 1, line 6, please delete the section heading.

Page 1, please delete the paragraph at lines 7, 8, and 9.

Page 5, please replace the paragraph starting at line 1 and ending at line 5, with the following paragraphs:

The protease inhibitors used in this invention can be prepared by means well known to those skilled in the art (see, e.g., U.S. Patent No. 4,760,130; European patent application 85 905 953.7, PCT application WO86/03519, and U.S. patent application 07/712,354, supra). The disclosed protease inhibitors include secretory protease inhibitors comprising the amino acid sequence of naturally-occurring secretory

leukocyte protease inhibitor or a substitution analog comprising the amino acid sequence (SEQ ID NO:4):

R1 -Gly-Lys-Ser-Phe-Lys-Ala-Gly-Val-Cys-Pro-Pro-Lys-
Lys-Ser-Ala-Gln-Cys-Leu-R2 -Tyr-Lys-Lys-Pro-Glu-Cys-
Gln-Ser-Asp-Trp-Gln-Cys-Pro-Gly-Lys-Lys-Arg-Cys-Cys-
Pro-Asp-Thr-Cys-Gly-Ile-Lys-Cys-Leu-Asp-Pro-Val-Asp-
Thr-Pro-Asn-Pro-Thr-Arg-Arg-Lys-Pro-Gly-Lys-Cys-Pro-
Val-Thr-Tyr-Gly-Gln-Cys-R8 -R3 -R9 -Asn-Pro-Pro-Asn-
Phe-Cys-Glu-R4 -Asp-Gly-Gln-Cys-Lys-Arg-Asp-Leu-Lys-
Cys-Cys-R5 -Gly-R6 -Cys-Gly-Lys-Ser-Cys-Val-Ser-Pro-
Val-Lys-R7

wherein

R1 and R7 are the same or different and are selected from the group consisting of a substituted or unsubstituted amino acid residue or derivatives thereof; and

R2, R3, R4, R5, R6, R8 and R9 are the same or different and are selected from the group consisting of methionine, valine, alanine, phenylalanine, tyrosine, tryptophan, lysine, glycine and arginine.

It is believed that minor alterations to the amino acid sequence at the C- and N-termini will not significantly alter the activity of the disclosed protease inhibitors.
Specifically, substitution at the C- or N-terminus with a cyclized amino acid, for example, proline, is believed to result in a protease inhibitor having the desired serine protease inhibiting activity. Also, analogs of the disclosed protease inhibitors which have alterations at the C- or N-terminus, which alterations do not destroy the serine protease inhibitor properties of the analog, are included within the scope of the present invention.

After page 37 and before the claims, please delete the Sequence Listing inserted in the Amendment submitted on December 26, 1996.

Please insert the attached Sequence Listing starting on a new page after the abstract.